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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,135	10/14/2004	Taemi Wada	60188-982	9229

7590   10/07/2008

Jack Q Lever Jr
McDermott Will & Emery
600 Thirteenth Street NW
Washington, DC 20005-3096

EXAMINER
ARMOUCHE, HADI S

ART UNIT	PAPER NUMBER
2432	

MAIL DATE	DELIVERY MODE
10/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<table>
<tr>
<td rowspan="2">Office Action Summary</td>
<td>Application No.
10/511,135</td>
<td>Applicant(s)
WADA ET AL.</td>
</tr>
<tr>
<td>Examiner
HADI ARMOUCHE</td>
<td>Art Unit
2132</td>
</tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 July 2008*.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-10,12 and 13* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☒ Claim(s) *3-9 and 13* is/are allowed.
6)☒ Claim(s) *2, 10 and 12* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *14 October 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.	This communication is in response to the amendment filed on 7/14/2008. Claims

1 and 11 are cancelled, claims 2, 12 and 13 have been amended. Claims 2-10, 12-13

are pending.

Claim Rejections - 35 USC § 103

2.	The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.	Claims 2, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Denney et al (US 2003/0061623) referred to hereinafter by Denney in view of

Momona et al, "Technologies and Standardization Activities in Cable TV Access

Networks", Technical Report of Institute of Electronics, Information and Communication

Engineers IN98-164, February 15th 1999, Pages 57-64, Vol 98 No.589, referred to

hereinafter by Momona.

4.	Regarding claim 2, Denney teaches a device for performing bidirectional control

in digital bidirectional communication, comprising:

an interface block for converting a format of input downstream data to generate

downward data [figure 8: element 702]*;*

a CPU which receives the downward data and realizes a MAC (Media Access

Control) function [figure 8: element 712 and paragraph 16]*; and*

a TEK process block for receiving TEK (Traffic Encryption Key) process data

obtained from the downward data, analyzing a data structure of the TEK process data,

and performing decryption processing based on a result of the analysis [paragraphs

19, 51 and 63].

wherein the TEK process block includes:

a structure analysis block for analyzing an MPEG structure included in the

received TEK process data and a MAC (Media Access Control) structure buried in the

MPEG structure to output MAC state information data that represents a state and

meaning of MAC data having the MAC structure [paragraphs 20, 42 and 85];

a decryption block for identifying encrypted part of the TEK process data by

referring to the MAC state information data, decrypting the encrypted part using TEK

data for cryptanalysis, and integrating a result of the decryption with unencrypted part

of the TEK process data [paragraphs 51 and 63].

However, Denney does not explicitly teach *a structure analysis block for*

analyzing an MPEG structure included in the received TEK process data and a MAC

(Media Access Control) structure buried in the MPEG structure to perform error

detection using HCS data and error detection using MAC header information except for

HCS data.

Momona teaches *a structure analysis block for analyzing an MPEG structure*

included in the received TEK process data and a MAC (Media Access Control)

structure buried in the MPEG structure to perform error detection using HCS data and

error detection using MAC header information except for HCS data [Figure 3 and

section 2.4.1].

At the time of the invention was made, it would have been obvious to an ordinary

skill in the art to combine Momona's teachings with Denney's device. The

motivation/suggestion would have been to use the HCS data and the MAC header

information in the error correction coding based on ITU-J.83 and to modulate before

sending the MPEG packet [Momona, section 2.4.1 last three lines].

5.   The method of claim 12 has the same limitations as the device of claim 2 and

hence same rejection rational is applied.

6.   Regarding claim 10, Denney teaches that *the decryption block performs the*

steps of:

referring to the MAC state information data to identify encrypted part and

unencrypted part of the TEK process data [paragraphs 46 and 51];

extracting from the TEK process data TEK collation data for selecting TEK data

[paragraphs 63 and 64];

referring to the extracted TEK collation data to select TEK data used for

decryption from a plurality of items of pre-stored TEK data [paragraphs 63 and 64];

converting the encrypted part so as to have a bit width equal to a unit of

decryption processing and decrypting the converted encrypted part using the selected

TEK data; and integrating the decrypted data and the unencrypted part. [paragraphs

65-69].

Allowable Subject Matter

7.   Claims 3-10 and 13 are allowed.

8.   Regarding claims 3 and 13, although the prior art of record teaches and/or

suggest that *the TEK process block includes a structure analysis block for analyzing an*

MPEG structure included in the received TEK process data and a MAC (Media Access

Control) structure buried in the MPEG structure, none of the prior art of record alone or

in combination teaches that *the structure analysis block includes:*

> *a MAC header analysis block for receiving the MAC data position signal*

and the MAC data head position signal and determining a state information for fields

included in a MAC header of the MAC structure except for an extension header and a

MACMM (MAC Management Message) header, wherein the MAC header analysis

block outputs extension header position information data which indicates a position of

the extension header when the TEK process data includes the extension header, and

the MAC header analysis block outputs MACMM header position information data

which indicates a position of the MACMM header when the TEK process data includes

the MACMM header;

> *an extension header analysis block for receiving the extension header position*

information data and checking fields of the extension header to output extension

header state information data which represents state information of the extension

header;

and a MACMM header analysis block for receiving the MACMM header position

information data and checking fields of the MACMM header to output MACMM header

state information data which represents state information of the MACMM header,

wherein the MAC header analysis block receives the extension header state

information data and the MACMM header state information data and generates the

MAC state information data based on state information of the fields included in the

MAC header except for the extension header and MACMM header, the state

information of the extension header which is represented by the extension header state

information data, and the state information of the MACMM header which is represented

by the MACMM header state information data.

9.   Claims 4-9 are allowable by virtue of their dependency on claim 3.

Response to Arguments

10.   Applicant's arguments with respect to claim2 and 13 have been considered but

are moot in view of the new ground(s) of rejection.

Conclusion

11.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HADI ARMOUCHE whose telephone number is (571)270-3618. The examiner can normally be reached on M-Th 7:30-5:00 and Fridays half day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. A./
HADI ARMOUCHE
Examiner, Art Unit 2132

/Gilberto Barron Jr/
Supervisory Patent Examiner, Art Unit 2132